

TC 4.5 Program Subcommittee Meeting Minutes

Sunday, January 13, 2002

10:00 – 11:00 a.m.

Room 316

Atlantic City Convention Center
Atlantic City, New Jersey

Attendees[17]

Mahabir Bhandari/Univ. of Massachusetts
Michel Bernier/Ecole Polytechnic of Montreal
Mike Collins/Univ. of Waterloo
François Dubrous/NRCan
William duPont/LBNL (Chair)
Hakim Elmahdy/IRC/NRC
Howdy Goudey/LBNL
Steve Harrison/Queens Univ.
Joe Klems/LBNL

Christian Kohler/LBNL
Peter Lyons/Australian Window Assoc.
David Mather/Univ. of Waterloo
Anil Parekh/NRCan
Bipin Shah/NFRC
David Tait/Tait Solar Company
John Wright/Univ. of Waterloo
Sam Yuan/ETC Laboratory, Inc.

I. Introductions, and Mahabir Bhandari agreed to be secretary

II. Atlantic City Program, January 12-16, 2002

Symposium: “Approaches to Evaluating Fenestration”, *Chair: William duPont/LBNL* {01/13/02 8:00-10:00 a.m., Room 322, Atlantic City Convention Center}

- 1) “Sensitivity Analysis of Heat Transfer from an Irradiated Window and Horizontal Louvered Blind Assembly”, *Michael R. Collins, S.J. Harrison, & P.H. Oosthuizen/Queen's University, and D. Naylor/Ryerson University*
- 2) “Solar Heat Gain Through Fenestration Systems Containing Shading: Summary of Procedures for Estimating Performance from Minimal Data”, *Joseph H. Klems/LBNL*
- 3) “Surface Temperatures of Window Specimens: Infrared Thermography Laboratory Measurements”, *B.T. Griffith/MIT, and Howdy Goudey & Dariush K. Arasteh/LBNL*

Deadlines: Technical Papers were due to ASHRAE on April 2, 2001;

TC 4.5 Symposium Papers were due to Symposium Chairs on April 2, 2001;

All reviewed paperwork with TC Chair signature to ASHRAE: August 3, 2001.

III. Honolulu Program, June 22-26, 2002

[1] **Symposium:** “Improvements in Fenestration Analysis”, *Chair: Dragan Curcija/Univ. of Massachusetts*

- 1) “Evaluation of Calorimeter Tilt Angle on the Impact of the Solar Heat Gain Coefficient Measurement Using an Outdoor Solar Calorimeter Located in Tempe, Arizona”
- 2) “Computer Simulation of Specimens Using THERM”
- 3) “Annual Energy Performance of Skylights”
- 4) “Air Leakage and Condensation Resistance Testing”
- 5) “Simplified Modeling of Cylindrical Skylights”
- 6) “Solar Heat Gain through a Skylight in a Light Well”

Honolulu Program, June 22-26, 2002 (continued)

[2] **Seminar:** “Back to Basics: Specifying the Right Windows for Your Job”, *Chair: François Dubrous/NRCan*

[3] **Seminar:** “Issues in Condensation in Commercial Fenestration Systems”, *Chair: Alex McGowan/Levelton Engineering*

NOTE: Number in brackets indicate priority as voted at the TC 4.5 Committee Meeting

**Deadlines: Technical Papers were due to ASHRAE on September 28, 2001;
TC 4.5 Symposium Papers were due to Symposium Chairs on September 28, 2001;
All reviewed paperwork with TC Chair signature to ASHRAE: February 8, 2002.**

Submit 1 copy of packet material to ASHRAE (Mary McGee, Meeting Program Administrator)

NOTE: When submitting paperwork to ASHRAE, be sure to include any special requests, i.e., day of the week you need to present or time (i.e., prefer Sunday or Monday). Please also inform your Section 4.0 Program Liaison of this information.

IV. Chicago Program, January 25-29, 2003

Symposium: “Infrared Temperature Measurements and Computer Simulation of Window Assemblies”, *Chair: François Dubrous/NRCan*

- 1) “Computer Simulation of Specimens Using FIDAP”, *Dragan Curcija/Univ. of Massachusetts*
- 2) “Test of Specimens Using Infrared Temperature Measurements”, *Hakim Elmahdy/NRC*
- 3) “Summary of Test and Simulation Results”, *Anil Parekh/NRCan*

Symposium: “Results from NFRC SHG Research Projects”, *Chair: Mike Collins/Univ. of Waterloo*

- 1) “Solar Heat Gain Coefficients for Seven Glazing Types in Combination With Nine Interior Window Attachment Products”, *David Tait/Tait Solar*
- 2) “Comparison of Results from the NFRC Solar Heat Gain Research Project”, *William duPont/LBNL*
- 3) “NFRC Glass Block Solar Heat Gain Research Project”, *David Tait/Tait Solar*
- 4) “Skylights”, *Joe Klems/LBNL*
- 5) “Storm Windows”, *Joe Klems/LBNL*

Symposium: “Evaluating and Improving Fenestration Frame Performance”, *Chair: Bipin Shah/NFRC*

- 1) “Warm Edge Technology”, *Hakim Elmahdy/NRC*
- 2) “Correlations for Frame Cavity Heat Transfer Using CFD and 2D Tools”, *Christian Kohler, Arild Gustavsen, Brent Griffith, and Dariush Arasteh/LBNL*
- 3) “Solar Heat Gain Coefficient Calculations for Frames Using 2D FEA Tools”, *Christian Kohler/LBNL and Dragan Curcija/Univ. of Massachusetts*
- 4) “Update of LBNL Research on Condensation Resistance Evaluation”, *Christian Kohler & Dariush Arasteh/LBNL*
- 5) “Condensation Simulation”, *John Wright/Univ. of Waterloo*

Chicago Program, January 25-29, 2003 (continued)

Symposium: “Improvements in Computer Modeling Fenestration Performance”, *Chair: Peter Lyons/Australian Window Assoc.*

- 1) “Variable-h Model for Improved Prediction of Surface Temperature in Fenestration Systems”, *Dragan Curcija and Yie Zhao/Univ. of Massachusetts*
- 2) “Use of Detailed Radiation Modeling in Predicting Heat Transfer of Fenestration Systems”, *Dragan Curcija/Univ. of Massachusetts*
- 3) “Calculation of Condensation Resistance Indices Using Computer Modeling Tools”, *Dragan Curcija/Univ. of Massachusetts and Bipin Shah/NFRC*
- 4) “Results and Lessons of NFRC Round Robin Testing and Simulations”, *Bipin Shah, Dan Wise/NFRC and Dragan Curcija/Univ. of Massachusetts*
- 5) “Impact of Fenestration System on Occupant Thermal Comfort,” Kirby S. Chapman & Jeet Sengupta/Kansas State Univ.

Deadlines: Technical Papers are due to ASHRAE on April 2, 2002;

TC 4.5 Symposium Papers are due to Symposium Chairs on April 2, 2002;

All reviewed paperwork with TC Chair signature to ASHRAE: August 2, 2002.

V. Kansas City Program, June 22-26, 2003

Deadlines: Technical Papers are due to ASHRAE on September 27, 2002;

TC 4.5 Symposium Papers are due to Symposium Chairs on September 27, 2002;

All reviewed paperwork with TC Chair signature to ASHRAE: February 7, 2003.

VI. Adjourn

Respectively Submitted: Mahabir Bhandari/Univ. of Massachusetts